

PART 611-7: RECOMMENDATIONS

Considering the goals and policies that resulted from the public participation process, along with the trends, needs, and financial analyses, the following recommendations are made to direct management and development of transportation in Rhode Island. These recommendations are arranged by the goals and policies (*italicized text*) that they principally implement.

The Transportation Advisory Committee (TAC) recommended on June 28, 2001 that, as part of the 2001 update, the financial recommendations of this plan be moved to the beginning of Part 611-7 to highlight the underlying importance of the financing issue and the growing urgency that the State act to insure adequate financing sources are in place to support the future development, management and operational needs of the transportation system, as outlined in this long range plan.

7-1 PROVIDE ADEQUATE FINANCING FOR THE TRANSPORTATION SYSTEM

1-1 *Complete the conversion of the gasoline tax to a user fee and assess the appropriate revenue target for this fee to adequately provide for the transportation system's needs*

- a. Continue increased allocation of gasoline tax revenues to RIPTA and RIDOT and maintain a tax level appropriate to support the transportation system's needs.
- b. Recognize that even allocation of all gasoline tax revenues (at the current level) will not be sufficient to meet RIDOT and RIPTA needs for operations, debt service, and match for federal capital funds. Different financing approaches should be considered, with the intent to reduce reliance on bonding and debt service.

1-2 *Reduce the level of transportation bonding*

- a. Phase out the use of general obligation bonds for improvement and maintenance of the transportation system except for only the largest capital projects that have a long useful life.

1-3 *Set a new target for transit revenues*

- a. Continue to increase RIPTA's fixed-route farebox recovery ratio until it reaches 35 percent. The farebox recovery ratio should not decline under 35 percent thereafter.



- b. Develop a fare structure for paratransit service, and charge a fare for all paratransit services. (At present, fares are charged only to Americans with Disabilities/ADA clients.) Give incentives to riders to use the less costly fixed-route bus system over paratransit services to meet their basic transportation needs. Charge an administrative fee for paratransit services to cover RIde and RIPTA administrative costs. Continue to apply federal funding toward the overall administrative cost, but require users and their representatives to pay in accordance with the amount of services consumed.
- c. Work on development of a fare structure for human and educational services that purchase and/or provide transportation services in conjunction with their primary responsibilities.

1-4 *Consider tolls as another form of user fee where feasible*

- a. Study an automated cashless system of collection where toll facilities are or could be used. Also, study toll structures based on time of day and vehicle weights.

1-5 *Find additional financing sources and mechanisms.*

- a. Utilize new funding mechanisms available through the federal Transportation Equity Act for the 21st Century (TEA-21) and successor laws.
- b. Utilize the new Rhode Island State Infrastructure Bank.
- c. Consider Special Benefit Assessment Districts and Business Improvement Districts (BID). Property owners would be assessed for new highway improvements that support an area. This type of designation may require legislation.
- d. Designate Transit Services Districts (TSD). Property owners would be assessed for transit service in lieu of creation of parking facilities. (This approach could be considered to continue the LINK trolley service after federal CMAQ funding terminates in 2002.)
- e. Consider the use of dedicated sales taxes (such as was done for DEPCO) to reduce transportation bond indebtedness.
- f. Allow Infrastructure Equity Contributions by abutters, also known as stakeholders' investments. Special "*densification zoning*" assists this undertaking.

1-6 *Establish a grant program for municipalities to help fund local road improvements (resurfacing and rehabilitation, sidewalks, bike routes, traffic calming, etc.)*

- a. Introduce legislation to appropriate funds to local governments based on a formula that uses road mileage, functional classification, and auto registrations.

1-7 *Clarify and publicize the priorities for transportation investments*

- a. Continue to develop and distribute the biennial Transportation Improvement Program (TIP) using an extensive public involvement process.
- b. Calculate and publicize the costs and benefits of major transportation investments.

7-2 RELATE TRANSPORTATION TO LAND USE AND DEVELOPMENT

2-1 *Achieve more concentrated development patterns*

- a. Implement the goals and policies of the state's land use and transportation plans which seek to concentrate growth within or adjoining existing built-up areas, avoid urban sprawl, reduce air and water pollution, and encourage greater use of transit and other alternative modes of transportation. Work, through the Growth Planning Council, with state agencies, cities and towns, private interests, and citizens to:
 - Target transportation system investments, and provide other incentives to encourage the concentration of growth within "growth centers" which have, or are planned to have, services and infrastructure necessary to support intensive development, and are planned for well-designed, higher density, mixed use, transit and pedestrian-friendly land uses;
 - Evaluate the effects of the existing property tax system on growth patterns and support revisions that will encourage growth and development within existing urban centers;
 - Provide leadership, incentives, and the information and technical training needed by communities to update the land use and transportation elements of their comprehensive plans and their land development, subdivision, and zoning regulations to attain more concentrated development patterns, where appropriate; and
 - Educate the public concerning the (transportation, environmental, energy-efficiency, service-cost savings, and other) benefits of more concentrated development, as compared to diffuse, low density "sprawl" patterns.
- b. To reduce congestion and improve air quality, encourage the use of telecommuting, both home-based and at satellite offices where such actions support the *State Land Use Policies and Plan*.
- c. Give special attention to assure that housing and social facilities are located in developed areas and designed to be accessible and friendly to pedestrians and transit. This issue is particularly important in the siting of housing for elderly and/or disabled individuals.
- d. Work with municipalities to encourage industry, particularly those which employ urban populations, to locate in transit-accessible, urban areas. Major developments should allow for alternative transportation modes where feasible.

2-2 *Use transportation to support individual economic independence and community economic development*

- a. Support regional examination of interstate transportation-related economic development issues.

- b. Develop transportation models to implement welfare-to-work goals, as a cooperative effort among the Department of Human Services, the Department of Labor and Training, RIPTA, RIDOT, and the Statewide Planning Program. Utilize existing resources where feasible.
- c. Encourage dialogue with private businesses to design innovative transportation strategies that will help low-income residents access employment, particularly jobs in suburban areas.
- d. Use transportation system investments strategically to support the economic vitality of historic "Main Streets" and similar traditional business centers.
- e. Study an Interstate ramp system at RI-4/ I-95. This would support the full development of the Quonset /Davisville Port and Commerce Park.
- f. Complete development of the Warwick Intermodal Rail Station, and institute rail shuttle service to provide a direct rail connection to T.F. Green State Airport and support revitalization of the adjacent Warwick Station District.

2-3 *Encourage cities and towns to control land development along arterial highways so as to preserve their function.*

- a. Assist communities to provide more control over frontage development, for example, by combining access points where possible and eliminating duplicate curb cuts.
- b. Encourage local planning departments to utilize growth controls along arterial highways.
- c. Encourage communities to identify design objectives (including landscaping and aesthetic goals) for arterials, gateways, major intersections, and collector streets in local comprehensive plans.
- d. Perform corridor studies to strengthen the state's role in access management and corridor preservation.

2-4 *Continue integrating the planning process between towns, cities, regions and state agencies, and among states in the New England/northeast region.*

- a. Expand the Statewide Planning Program's efforts to coordinate planning with municipalities.
- b. Provide adequate staffing and training in the transportation section of the Statewide Planning Program to conduct the federally mandated planning process.
- c. Continue the State Planning Council's Transportation Advisory Committee, RIPTA's Accessible Transportation Advisory Committee, and the co-sponsoring of planning seminars with other agencies, private organizations, and institutions of higher learning.
- d. Support the education of local officials with regard to land use, zoning and transportation.

- e. Share transit data elements among RIPTA, RIDOT, and the Statewide Planning Program.

2-5 Compress the time between planning and implementation

- a. Institute procedures to streamline the review process as projects go forward to design and construction.
- b. Select more projects that are lower in cost, faster to implement, and give more transportation performance for the dollar.
- c. Integrate and pursue the recommendations from the following studies: Rail Corridor Study, Waterborne Passenger Transportation Study, Aquidneck Island West Side Transportation Guide Plan, RIPTA study on coordination of fixed-route and paratransit services, South County Commuter Rail Study, and Commercial Vehicle Parking Needs Study.
- d. Improve the integration of the Technology Transfer Center and utilize the URI Transportation Center for future studies.
- e. Continue addressing regional transportation issues, including high-speed rail, bus/rail/air connections, intercity bus, interstate transit/paratransit connections, and commuter rail service to Boston as well as to Connecticut locations. Support a “North-South Rail Link” in Boston to improve regional passenger rail connections.

2-6 Organize transportation planning in Rhode Island around a travel corridor planning approach

- a. Devise a multi-disciplinary, multi-jurisdictional corridor planning process that includes land use, intermodal facilities, multimodal transportation, travel demand modeling, existing capacity and infrastructure (to name a few) along with performance measures and fundamental data requirements.
- b. Use the corridor approach as a framework to integrate Rhode Island’s transportation planning into the interstate regional transportation systems of New England and the northeastern United States.
- c. Recognizing that transportation and land uses are intrinsically intertwined so that one cannot be planned for properly without the other, undertake as part of transportation corridor planning coordinated, cooperative, and proactive land use/land management planning effort by the State and city and towns located in transportation corridors.
- d. Upon adoption of corridor plans as part of the state guide plan, work with municipalities to insure that local comprehensive plans incorporate, and become consistent with, the recommendations of the Corridor plan(s) for which they are a component. Corridor planning will enable transportation planning to go beyond the municipal boundaries.
- e. Provide assistance to communities to enable their participation in a cooperative planning effort to support corridor planning studies.

- f. Integrate the State's Congestion Management and Air Quality planning process within the travel corridor planning process.
- g. Identify and prioritize travel corridors for study. Statewide Planning, in cooperation with RIDOT, will provide the results of this process to the State Planning Council for endorsement.

2-7 *Elevate consideration of pedestrian transportation needs to a priority level equal to that given to automobile and transit modes.*

- a. Pedestrian planning considerations must be fully integrated into and recognized as a priority in all transportation and land use planning processes. Encourage local municipalities to inventory their walking infrastructure (collectors and local streets) for the comprehensive plan, and ensure that communities adequately address pedestrian circulation and safety needs through their comprehensive plans.
- b. Use the travel corridor process, and other channels to provide input on local and regional planning issues and initiatives to improve walking facilities. Offer technical assistance to cities and towns and other groups on detailed planning and design standards to effectively integrate pedestrian considerations into the development process.
- c. Ensure that transportation facility design, construction, and operational procedures respond to pedestrian travel needs and promote community walkability wherever possible, by the following steps:
 - Provide crosswalks, or other pedestrian crossing aids, such as pedestrian signals, pushbuttons, raised median strips, mid-block crosswalks and signals, as appropriate, whenever circumstances suggest pedestrian demand or the need for crossing assistance. Improve crosswalk design (zebra striping, additional signage) to make them more visible to drivers and install alternative signals (e.g, in-pavement flashing strobes) at high hazard crosswalks to alert motorists that pedestrians have activated the walk signal.
 - Examine existing pedestrian facilities to determine that they meet current minimum standards.
 - Assess signal pedestrian cycles in light of the aging population to provide adequate timing for safe crossing.
 - Employ traffic calming strategies where warranted to enhance pedestrian safety. Increase the width of existing sidewalks where obstructions reduce walking space.
 - Include sidewalks in both directions and appropriate street crossing facilities for bus stop shelters.



- d. Encourage communities to promote walkability through their zoning and land development ordinances by zoning for a pedestrian scale of development, by including requirements and/or incentives for linking new development to adjoining developments via sidewalks or pathways, and limiting/reducing the number of driveways along a roadway to improve pedestrian safety.
- e. Provide sidewalks within school areas, and address pedestrian safety concerns in the site selection criteria for all new schools. In conjunction with local planning and public works departments, initiate a pilot program to establish school trip safety committees.
- f. Continue to improve pedestrian crash data reporting including modifications to make the reporting form more suitable to computerized information systems. Develop a system for ongoing data reporting and distribution.
- g. Encourage private sector developments (particularly where public funding participation is sought) to provide safe, accessible and convenient walking facilities to better accommodate pedestrians in highway-oriented commercial development.
- h. Consider funding a sidewalk program, and develop a prioritization system for sidewalk projects to improve walkability.
- i. Cooperate with public health and education agencies to develop and disseminate information encouraging the public to walk more for transportation and recreation. Information to be provided should include:
 - maps, signs and kiosks showing the best walking routes to major destinations;
 - walk and bicycle to school maps showing parents and children the safest routes to schools;
 - traffic safety education, including pedestrian and bicycle safety principles and practices, for school-aged children aged 5-13, and information directed at parents on specific traffic risks children are subject to and steps to increase their safety;
 - Information on the problems senior adults face as pedestrians, and ways to improve their personal safety and mobility; and
 - Information for motorists regarding their serious responsibilities for pedestrian safety and suggestions on how best to avoid pedestrian collisions.
- j. Work with the law enforcement community to give enforcement of traffic laws, particularly those affecting pedestrians, a higher priority. Provide training to law enforcement personnel on traffic violations affecting pedestrian safety, and on strategies for developing pedestrian safety enforcement programs. Carry out enforcement operations to vehicle operators who fail to yield to pedestrians.

7-3 GIVE PRIORITY TO PRESERVING AND MANAGING THE TRANSPORTATION SYSTEM

3-1 *Follow regularly scheduled programs of pavement and bridge management*

- a. Establish a regularly funded program to preserve the condition and safety of existing roads and bridges, drainage systems, and culverts, both state and local.
- b. Maintain the Interstate and National Highway Systems at “good” or better pavement condition. Maintain other systems at “fair” or better condition.
- c. Rehabilitate or replace the Sakonnet River Bridge, and replace the south (east-bound) span of the Washington Bridge, as vital links in the Interstate and National Highway Systems.
- d. Provide necessary resources to strengthen enforcement of truck weight laws to reduce early deterioration of roads.
- e. As a long-range program, phase out reliance on bonds to fund such preservation costs, by shifting to user fees and tax revenues.
- f. Publish RIDOT data and analysis on pavement and bridge conditions, including mapping and recommended actions.
- g. Continue RIDOT's bridge washing program to reduce bridge corrosion and maintain bridge life.
- h. Replace existing yellow lights in traffic signals with low energy, longer-life LEDs, as funding permits.



3-2 *Improve the present overall level of RIPTA service*

- a. Support RIPTA with a dedicated funded program to maintain and improve bus service.
- b. Establish a regular review schedule for existing bus routes, using performance measures. Eliminate or modify poorly performing routes.

3-3 *Keep up with repair and scheduled replacement of facilities and equipment*

- a. Replace RIPTA vehicles in a timely manner based on the federal useful-life standards, as follows:

standard size heavy duty bus (35'-40')	12 years or 500,000 miles
medium size heavy duty bus (30')	10 years or 350,000 miles
small medium duty bus (<30')	7 years or 200,000 miles
other vehicles such as vans.....	5 years or 150,000 miles

- b. Regularly maintain highway-safety features such as signing, guardrail, lighting, striping, and pavement marking.

3-4 *Encourage alternatives to single –occupant auto travel*

- a. Give RIPTA the responsibility of “mobility manager” in Rhode Island. Include transit, paratransit, park-and-ride lots, vanpools, carpools, and other shared-ride alternatives as options to the single-occupant automobile. RIPTA could be the “one-stop shop” for access to intercity bus and rail, commuter rail, water transportation, and supporting bicycle and pedestrian modes for tourism and recreational travel.
- b. Work with cities and towns on their comprehensive plans and their land development, subdivision, and zoning regulations to support this policy (see recommendation in preceding section).
- c. Develop a program for state government, as a major employer leading by example, to encourage alternative modes. For example, examine the policy of providing free parking for state employees. Encourage use of financial incentives, similar to those provided by the private sector. Develop a telecommuting policy as an option to reduce travel demand.
- d. Work with private employers to provide incentive programs (parking cash-out credits) for public transit usage, carpooling, and other alternatives to single occupancy vehicle usage.

3-5 *Provide convenient intermodal connections*

- a. Continue to implement RIPTA’s Express Travel program, to offer products and services for commuters to use ridesharing.
- b. Pursue means to tie the various modes more closely, including shared ticketing and trip chaining opportunities.
- c. Continue Kennedy Plaza as a major intermodal terminal to connect local bus service to intercity bus and rail services, commuter rail, paratransit and taxi services, and pedestrian and bicycle routes.
- d. Maintain and improve connections and amenities at other important terminals, including Newport Gateway, Warwick Intermodal Rail Station, Quonset-Davisville, the Port of Galilee, Providence Station, Kingston Station, Westerly Station, and Woonsocket Depot.

3-6 *Use signage that distinguishes regions and themes*

- a. Install highway signing that better denotes destination points (civic centers, historic sites, business) rather than only town or place names.
- b. Utilize signs to direct tourists to key destination points. Work with regional and local tourism organizations.
- c. Work with cities and towns to provide more visible signage to identify major arterial routes. (Signage identifying the main route is needed in addition to identification of major cross-streets.)

3-7 *Give the public better information on transportation*

- a. Institute user-friendly communication technologies for the traveling public.
- b. Through RIPTA, provide information on all forms of transportation available to the public regardless of mode. Information should include how to access services, costs (if known), and where tickets may be purchased. Provide travel training and information to help passengers (e.g., elderly, disabled individuals) access and use the fixed-route system and other transportation services.
- c. Implement automated voice identification systems on transit vehicles and integrate it with visual readouts.
- d. Maintain an up-to-date bus system map and schedules showing transfer points to connecting lines.

3-8 *Focus on convenience and reliability when improving transit*

- a. To enable urban low-income workers to access employment in the suburbs, provide reverse-commuting options, utilizing various methodologies and models.
- b. Implement service that reduces overall door-to-door travel time. Integrate scheduling, including centralized dispatch for real-time dispatching capability, through a PC-based Global Positioning System (GPS) program. Integrate vehicle location systems for both fixed-route and paratransit, to enable timely intermodal connections. Improve the flow of data from transmittal of manifests to carriers, to actual data on trips provided and transmitted back to RIde from billing and statistical purposes. Automated data collection should provide for less manual effort at the driver level. Automate all transactions, including fare collection, through an automated data collection system and a fare media reader system. Review and institute where feasible a cash-less fare collection system.
- c. Give greater priority to implementing systems for the preemption of traffic signals to reduce bus travel time in congested corridors.

3-9 *Adjust transit operations to the changing needs of a dynamic population*

- a. Provide fixed-route transit utilizing large buses in the urbanized areas of the state. For suburban areas, provide a mix of services including fixed routes, point deviation, demand-response, carpooling, vanpooling, etc.
- b. Modify transit operations to reflect the changing characteristics of society: increasing senior population, welfare-to-work requirements, more non-work and linked trips, more travel by females, advancing technology, and others. Equipment, routes, service span, and other operational characteristics should consider low-income individuals and those with disabilities in addition to choice riders. Age should not be a primary characteristic to access reduced-cost public transit or paratransit services.
- c. Target specific travel markets for RIPTA's array of services.

3-10 *Make public transit safe and convenient for all kinds of trips*

(see above item)

- a. RIPTA should develop and enforce control policies including removal of unruly passengers when appropriate, in order to maintain an atmosphere that ensures customer safety and well-being during all phases of transit operations.
- b. Review all transportation services available in the state and address duplication of efforts, including equipment. Services include: fixed-route transit, RIde paratransit services, other paratransit operations (including municipal), school buses (including special education), Head Start, day care, and recreational programs.

3-11 *Integrate transportation of students with public transit*

- a. Establish contracts between RIPTA and school districts to provide transit services to students, particularly at the high school level (similar to the arrangement in the City of Providence).

3-12 *Reevaluate all aspects of parking*

- a. Establish satellite parking lots in conjunction with shuttle services to promote transit to special events, tourist attractions, and downtown areas.
- b. Provide sufficient and well-sited parking, along with alternative modes of transportation, to support tourism.
- c. Encourage cities and towns to modify parking provisions in their development regulations to give incentives to use alternative modes.
- d. Encourage (especially within projects receiving public support) the appropriate inclusion of trees, landscaping, and vegetated buffers within paved parking areas to reduce runoff, mitigate the "heat island" effect of paved areas, and improve aesthetics. *(See related recommendations of the Urban Forest Element of the State Guide Plan.)*

3-13 *Improve traffic flow and safety*

- a. Continue RIDOT's Incident Management Program and Transportation Management Center (TMC). Continue the introduction of Intelligent Transportation Systems to all Interstate highways and appropriate state routes.
- b. Mainstream the consideration of future ITS infrastructure needs in corridor studies and within the design phase of major reconstruction projects involving state arterials.
- c. Provide for safe pedestrian travel, including sidewalks, crosswalks, lighting, and signage.
- d. Work with communities to implement traffic-calming measures to slow traffic speeds in built-up areas. Encourage participation of local residents in design of traffic calming measures.



3-14 *Manage traffic incidents*

(see above item)

- a. Improve response time by emergency vehicles to traffic incidents on all highways.

3-15 *Promote less-used highways as alternatives*

- a. Identify major highways that are congested and that have less-used alternate routes.
- b. Use highway signs to direct traffic to appropriate alternate routes with less congestion. (Examples might include Route US-1 instead of Route 138 through South County and Routes I-195 & RI 24 to Newport, instead of Route 114). Institute variable message signs and other technology to direct traffic to reduce congestion.

3-16 *Insure that rail freight continues to serve the region*

- a. Complete the Freight Rail Improvement Project (Third Track) and clearance program.
- b. Work directly with other states to coordinate regional changes in freight/passenger rail service.

3-17 *Make the transportation system accessible to disabled people*

- a. Purchase, as Rhode Island's first experience with this technology, "low -floor" buses that have the potential for improving ingress/egress to buses without use of a wheelchair lift. This technology is less susceptible to technical malfunction and therefore provides more dependable service.

- b. Explore and test new on-board vehicle communications technologies in Rhode Island for visually impaired passengers.
- c. Develop state policy on using the least-cost, most efficient mode of travel for state-funded programs (e.g., transit over paratransit with rates structured to give priority to transit usage, and service to the nearest service outlet). Provide that all agencies purchasing paratransit services contract with RIde.
- d. Coordinate all state and municipal-funded transportation services, and consolidate operations where feasible. This includes fixed-route, paratransit, school districts, Head Start, temporary employment agencies, and human service agencies outside of the RIde system. There should be no fare-free service unless supported by a third-party payee.
- e. Ensure that all pedestrian facilities accommodate the needs of the physically challenged.
- f. Study the need for funding for unfunded federal mandates, in particular ADA service, which is escalating each year.

3-18 *Strengthen highway safety laws and programs*

- a. Institute higher standards for driver education, licensing, and relicensing.
- b. Provide stricter enforcement and penalties for unsafe vehicles, drunk driving, and “road rage.”
- c. Make Rhode Island’s left-turn rule consistent with national practice.

3-19 *Improve lighting on selected roads*

- a. Improve lighting to increase safety and reduce roadway glare on high-volume roads and interchanges. Continue using “full cut-off” fixtures when replacing, repairing, or erecting new lighting on state highways. Replace high-mast lighting in suburban areas with reduced glare lights.
- b. Design highway lighting systems and facilities to consider the needs of Rhode Island’s aging population, and minimize environmental and aesthetic impacts on surrounding areas.

3-20 *Address rail-highway grade crossings*

- a. Improve grade crossings on the Providence and Worcester main line to support modern freight movements from Quonset—Davisville and other industrial sites en-route.
- b. Improve grade crossings on other rail lines as necessary to improve safety.

7-4 DEVELOP NEW TRANSPORTATION FACILITIES AND SERVICES

4-1 *Establish terminals for intermodal connections at major transfer points*

- a. Locate new intermodal terminals in Warwick, Woonsocket, at Quonset Point/Davisville and at other current and future major transfer locations, including redeveloped park-and-ride locations around the state.
- b. Locate docking facilities for various water transportation modes in Newport. Accommodate high-speed ferry, other ferry services, cruise ship docking, harbor shuttles, and other tourist water services.

4-2 *Utilize transportation to support tourism*

- a. Reconstruct or rehabilitate the Sakonnet River Bridge as a vital link to Aquidneck Island supporting tourism.
- b. Implement transit services that enhance tourism for the Blackstone Valley and Providence County, Newport, and South County. Combine transit services with local tourism efforts to offer an alternative way of "seeing" Rhode Island.
- c. Make the transit system and intermodal connections user-friendly for all members of the riding public. Implement recommendations from RIPTA's comprehensive study of its transit/paratransit system.

4-3 *Decrease the time and cost of goods movement*

- a. Complete construction of relocated I-195 in Providence.
- b. Study improved access to the Port of Providence from the Interstate system.



4-4 *Provide a high level of transportation service at Quonset/Davisville Port and Commerce Park*

- a. Study an Interstate ramp system at RI-4/I-95.
- b. Complete the Freight Rail Improvement Project (Third Track).
- c. Complete the new Quonset Access Road.
- d. Determine the needed transit, ridesharing, and bicycle/pedestrian facilities and services for the increased number of commuters. Provide these facilities and services, so as to maximize the efficiency of the transportation system.

4-5 *Improve public transportation to and between suburban communities*

- a. RestructureRIPTA operations to meet suburban -to-suburban commuting patterns.

4-6 *Preserve rail rights-of-way*

- a. Continue to preserve and protect rail rights-of-way for potential future transportation uses. These include the Pontiac Secondary, the Newport Secondary, and all others in the Freight Rail Plan.

4-7 *Complete a statewide network of bicycle and pedestrian routes*

- a. Build a statewide, interconnected bicycle/pedestrian network, as recommended in the Greenspace and Greenways element of the State Guide Plan.

- Accelerate the state's bicycle program to complete a 200-mile statewide system by the year 2020. (This implies construction and/or striping an average of 7 miles per year.) Major additions will include but are not limited to:

- East Coast Greenway
- Blackstone Bikeway
- Providence Bike System
- Cranston Cross-City Bike System
- Washington Secondary Bike Path
- Trestle Trail
- South County Bike Path
- Aquidneck Island Bikeway Improvements
- Northwest Bike Trail – Woonasquatucket River Greenway
- Shoreline Bikeway
- Ten Mile Greenway
- Warwick Bike System
- West Bay Bike Path

- Insure that the state system of independent bicycle routes is integrated and provides for seamless connections, which enhance opportunities for longer-distance, cross-state bicycle travel and commuting.
- Plan and implement direct linkages in northern Rhode Island from the Northwest Bike Trail-Woonasquatucket River Greenway to the North-South Trail and the Blackstone Bike Path.
- Complete a safe and convenient direct connection between the northern terminus of the Washington Secondary bikeway (at the Providence/Cranston city line) and the Woonasquatucket River Greenway/bike route in Olneyville Square, Providence.
- Determine a safe and convenient means for providing bicycle access across the Pell, Jamestown, Mt. Hope, and Sakonnet River bridges. Convert the west end of the old Jamestown Bridge to pedestrian and fishing use.

- Accelerate the designation of on-road bicycle routes by striping and signing. Develop a statewide system of connecting bicycle routes. Continue the “bicycle tolerant” highway design policy to include bicycle features in highway reconstruction projects. Work with cities and towns to construct bike lanes to encourage bicycle use, especially in urban communities.
 - Promote locally sponsored bicycle facilities by offering technical assistance and grants for development of bikeways, which connect with or complement the state system.
 - Develop a system of naming, route designation, and signage/markings for the statewide bikeway system. The system should be consistent with national standards and the system developed by the East Coast Greenway Alliance (as it applies to Rhode Island’s segments of the East Coast Greenway).
- b. Promote bicycling and walking as transportation choices.
- Republish the RIDOT “Guide to Cycling in the Ocean State” and the “RI Greenways Map” on a periodic, continuing basis. Seek private sponsorship to defray costs.
 - Develop criteria to measure municipal performance on development of a balanced transportation system, and offer incentives (higher priority for state grants, better match ratio, etc.) for communities whose planning, zoning, and land development programs and local capital investments demonstrate a commitment and progress towards increasing the modal balance of their local transportation systems.
 - Continue to offer grants to local governments and non-profit groups for trail and greenway development under the National Recreational Trails Program administered by DEM.
 - Cooperate with local governments and the private sector to insure that end-use facilities (locking/storage, changing facilities and showers, etc.) are provided to enhance the convenience and feasibility of bicycle commuting.
 - Promote bike/bus intermodalism, for example, by marketing the availability of bike racks on RIPTA buses and by providing bicycle trip end-use facilities at major RIPTA intermodal centers.
 - Work with Amtrak, private ferry service operators, and the travel industry to develop streamlined procedures for carrying bicycles on trains and ferries, and to provide integrated route and schedule information and reservation services oriented toward touring bicyclists.
 - Develop a statewide trail plan, which inventories existing trails and provides a detailed trail development and maintenance program in support of the recommendations of the Greenspace and Greenways Plan.

c. Integrate bicycling and walking options into new development.

- Promote local regulations that encourage neo-traditional, village-centered, infill, and other walkable, bike-able, compact development patterns.
- Review standards for comprehensive plans to insure that bicycle/pedestrian considerations are included and that municipalities are planning a balanced transportation system.
- Promote adoption of municipal land development provisions that require integration of bicycle and pedestrian facilities (bikeways, bike lanes, and end use facilities; paths, sidewalks, trails) as part of site development.
- Give greater priority to traffic-calming and pedestrian features in community planning and development.
- Insure that all state highway projects consider the potential for enhancing opportunities for walking and bicycling.

4-8 *Expand alternative means of transportation to colleges and universities*

- a. Offer alternatives when feasible, as part of RIPTA's Express Travel Program. RIPTA presently serves all colleges and universities in Rhode Island, sometimes with only limited service. The Express Travel program should work with the public colleges and universities to reduce the availability of free and/or low-cost parking available on or near campuses.

4-9 *Test the potential for new transportation service by rail and water*

- a. Expand water transportation system connections. Pursue experimental (pilot) water transportation services between Providence and Newport, and consider service to Quonset Point/Davisville, Warwick, and other Bay communities if feasible.
- b. Plan for the incremental extension of Boston-Providence commuter rail service to T.F. Green State Airport and Wickford Junction, and from Boston to Fall River, MA. Study growth impacts of rail service and work with affected cities and towns to implement growth management measures in concert with extension of rail service.

4-10 *Provide alternative modes of transportation for short-distance, high- traffic situations*

- a. Use RIPTA to design alternative transportation, modeled on the successful "Link" service in downtown Providence, for short-distance, high-volume traffic areas, especially when congestion, cost, and other obstacles constrain movement. Examples include links for rail stations and airports to destinations/attractions (e.g., Newport, tourist areas).

4-11 *Recognize that existing transit operators represent assets*

- a. Complete recommended changes to integrate the fixed route and paratransit systems as recommended in the comprehensive RIPTA (Abrams-Cherwony) study. Integrate more human service transportation programs with RIde and the transit system to provide more efficient use of existing resources.

- b. Begin discussions and implement a pilot project to integrate education-based transportation programs with public systems to provide for more efficient and effective use of existing resources.

7-5 INSURE THAT THE TRANSPORTATION SYSTEM EMBRACES THE PRINCIPLES OF ENVIRONMENTAL STEWARDSHIP

5-1 Enhance transportation programs and projects

- a. Continue transportation enhancement and congestion management/air quality projects.
- b. Use the Enhancements Program to encourage urban revitalization, such as Main St. restoration.
- c. Preserve historic transportation structures such as rail stations.



5-2 Support the preservation of open space and rural character, and the creation of greenways called for in the state's Greenspace and Greenways Plan and in local comprehensive plans

- a. Continue the scenic roadways program. Work with communities to adopt land management requirements which preserve the character and scenic resources within the corridors of designated scenic roads.
- b. Work with cities and towns to update the land use and transportation elements of their comprehensive plans and their land development, subdivision, and zoning regulations to support this policy.
- c. Continue the partnership among federal, state, local and private agencies and groups to provide funding for open space preservation and greenway creation.

5-3 Formulate improved design standards for roads and streets

- a. Continue close cooperation with local planning departments, local public works departments, historic preservation groups, and other stakeholders in designing streets that are safe and inviting public spaces. Provide a high quality of landscape design, that supports environmental goals, is compatible with the context of the surrounding area, and meets the needs of pedestrian and bicycle, as well as vehicular travelers.
- b. Use modified design standards for country and village roads, to provide for a safe roadway without damaging local character (e.g., scenic highway standards).

- c. Consider air quality benefits and energy efficiency in facility design and construction.
- d. Promote the development and management of transportation corridors as greenways.
- e. Develop guidelines encouraging the establishment of street trees as buffers delineating pedestrian and vehicular portions of the right-of-way.
- f. Encourage the use of vegetated buffers to reduce stormwater runoff from highways and parking lots, and to serve as noise barriers along high-volume highways and rail corridors.
- g. Enhance the livability of communities by designing roadways that include landscaping, parkway trees, compatible street furnishings, and scenic view corridors.
- h. Encourage communities to require the reservation of planting strips of sufficient width for street trees in plans for new streets and roads approved under local subdivision and land development review provisions.
- i. Where possible, manage vegetation in transportation right-of-ways for multiple objectives: safety, water quality, community aesthetics, and natural habitat values.
- j. Encourage a high level of tree planting and landscaping in state construction projects.

5-4 *Manage highway runoff to improve water quality*

- a. Expand the number of projects that address the impacts of roads on water quality, through expanded use of new techniques and infiltration structures in reconstruction projects.
- b. Continue cooperation with DEM and the Coastal Resources Management Council (CRMC) on the design and construction of efficient and environmentally friendly stormwater drainage systems, including the construction of stormwater retrofit “best management practices” identified through DEM’s TMDL (Total Maximum Daily Load) Program.
- c. To the extent possible, retain stormwater in the right-of-way of state highways. Coordinate state stormwater tie-ins with municipalities. Inclusion of highway stormwater drainage systems is crucial, and the maintenance of these systems should be a priority.
- d. Implement the six *Phase II* minimum requirements under the federal/state stormwater management programs.
- e. Regularly maintain stormwater drainage systems and evaluate the need to retrofit existing drainage structures to enhance removal of pollutants, especially within the watersheds of impaired waters and over groundwater aquifers.

5-5 *Reduce mobile source contributions to air pollution and greenhouse gases*
(see also recommendations 2-7, 3-10, and 4-7 above.)

- a. Reduce congestion to reduce air pollution emissions during idling.
- b. Provide commuter parking in prime commuting corridors and areas.
- c. Continue to add alternative fuel technology vehicles to the state and local vehicle fleets. Encourage greater use of hybrid electric/gasoline vehicles that do not require special fueling stations. Continue to replace older transit vehicles with clean fuel vehicles.

7-6 *INSURE THAT THE TRANSPORTATION SYSTEM EQUITABLY SERVES ALL RHODE ISLANDERS*

6-1 *Continue transportation initiatives that enable low income workers/job seekers to access job opportunities.*

- a. Expand the Access to Jobs/Reverse Commute Program to include additional municipalities and welfare populations. Increased funding and program expansion will help ensure that additional unemployed populations experiencing transportation difficulties benefit from access to the program.
- b. Investigate HUD's "Bridges to Work" model to involve employers in provision of transportation for low-income employees.
- c. Incorporate additional state agencies as partners in addressing transportation inequities in job access. The Department of Labor and Training and the Rhode Island Economic Development Corporation should be included in discussions with transportation agencies.
- d. Provide incentives for employers to offer transportation to low-income employees lacking reliable transportation options. An incentive-based program for suburban employers who offer transportation for low-income urban residents could increase the likelihood that urban residents can access and maintain well-paying jobs.
- e. Investigate options for car-sharing programs or car purchase assistance for low-income populations. North Carolina, Tennessee, and New Jersey have experimented with programs to help low-income families purchase vehicles.

6-2 *Improve transit services available to low income, minority, elderly, and mobility-impaired populations in rural, suburban and urban areas*

- a. Continually seek to improve the "on-time" performance of the transit system. Require drivers to check-in at stops. Revise schedules if times between stops are impractical or unattainable as a result of traffic or increased use.

- b. Work with towns in suburban and rural areas to expand demand response and flex route systems to improve access by poor, elderly, and mobility-impaired residents to jobs, medical facilities, and social services.
- c. Expand mid-day, evening, and weekend hours of all regular RIPTA routes. Use of vans or trolleys may help offset costs of operating large buses during off-peak times.
- d. Consider extending RIPTA's trolley service into Providence neighborhoods, other than downtown.
- e. Coordinate transit hours of service with social service agencies, medical facilities, major employers, and supermarkets/shopping centers.
- f. Consider offering flexible alternatives for residents using transit for activities such as grocery shopping. Similar to flex service in other communities, provide a small van to pick up passengers after they have completed grocery shopping.
- g. Provide multilingual (Spanish and predominant Southeast Asian languages) printed transit information on buses, and at bus stops and businesses along bus routes.
- h. Make transit use safe for riders both on and off of buses. Consider measures such as distress/"panic boxes" at bus stops, improved lighting at stops and shelters, assistance/security personnel at Kennedy Plaza and on buses, and additional bus shelters along all RIPTA routes.
- i. Provide first-class customer service by RIPTA drivers to all transit users. Provide cultural competence training for RIPTA drivers and other customer care personnel. Require drivers to announce stops and route information. Provide comments cards for RIPTA customer feedback.
- j. Assure that transit services consider the special needs and respect the self-esteem of disabled and elderly customers. Require drivers to stop at all bus stops and for all customers. Regularly inspect to insure the operability of lifts for handicapped accessibility on buses. Enforce restricted seating for elderly and handicapped riders.
- k. Strive to make transit use affordable for low-income residents. Advertise existing programs that benefit economically disadvantaged residents. Develop more convenient options for Rite Care recipients to access free bus passes. Consider a transportation fund to assist income-eligible individuals with the cost of bus passes.



6-3 *Target pedestrian and bicycling improvements in neighborhoods with significant low income and non-white populations
(see also recommendations under 2-7 and 4-7 above)*

- a. Use accident data to identify high-hazard intersection locations with the highest occurrences of vehicular and pedestrian accidents.

- b. Expand pedestrian safety educational effort aimed at motorists and pedestrians. Drivers need to know the law regarding pedestrian safety and the importance of heeding pedestrian rights. Similarly, education aimed at pedestrians should stress using crosswalks.
 - c. Work with communities to increase enforcement of traffic laws requiring vehicles to yield to pedestrians in crosswalks and at intersections.
 - d. Make urban bicycle paths safe for pedestrians and bicyclists by including distress “panic boxes” at appropriate intervals and providing appropriate lighting.
 - e. Expand the use of neighborhood traffic calming measures.
 - f. Redesign curb cuts and improve sidewalk conditions to facilitate movement of wheelchair-assisted travelers. Insure compliance of “as built” conditions with ADA guidelines.
 - g. Encourage communities to adopt and enforce snow removal ordinances policies to improve safety conditions for wintertime pedestrian travel.
 - h. Encourage communities to adopt *maximum* building setback distances for new and “in-fill” commercial developments to discourage suburban-style setbacks with parking facilities in front of the building. Infill structures set closer to the street elevate pedestrian access over vehicular access. Such setbacks would then require parking lots to be constructed to the sides or behind structures.
 - i. On-road bike lanes in urban environs should provide a minimum acceptable width to ensure bicyclists safety, have adequate striping, signage, and, when possible, physical barriers to separate bike lanes from motor vehicles and make them clearly visible to motorists.
 - j. Install bike-parking facilities at public properties such as schools, community centers, and libraries. Encourage businesses to provide bike-parking options.
- 6-4 *Institute outreach guidelines and processes to involve all Rhode Islanders (urban, suburban, rural) in the transportation planning process, giving particular emphasis to measures needed to engage lower-income residents, recent immigrants, and minority groups.*
- a. Continue to evaluate and improve the transportation planning processes’ outreach measures to attain greater inclusiveness and accessibility for all population groups and interests.
 - b. Work with cities and towns to insure that local transportation planning and project development reflects the needs of all aspects of the community.